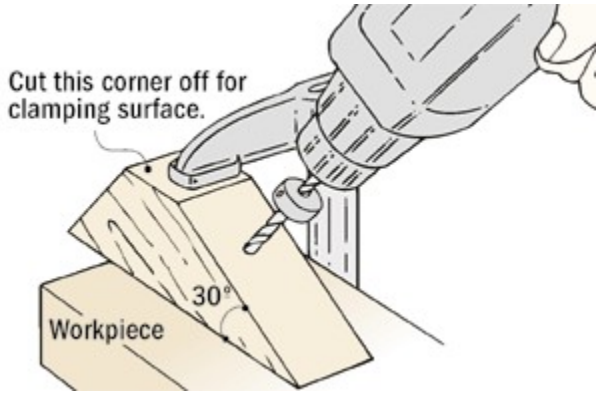
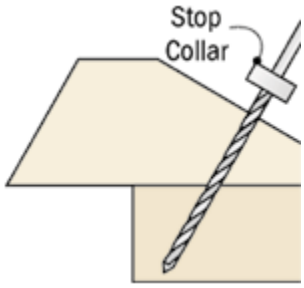
Jig for Angle Drilling

During a recent project, I needed to "toe-screw" several pieces together -- drive the screws in at an angle, in other words.

Normally, I'd simply drill pilot holes and drive the screws freehand. But since I had a lot of screws to drive, I wanted to make sure they were consistent.

My solution was to make a simple angle-drilling jig (see top drawing). To make the jig, first I drilled a 3/8"-dia. hole in the edge of a 2x6 about 3 in. from the end of the board. Then I cut the corner of the board off at a 30° angle. To create a flat clamping surface, I also cut the "top" corner of the board.

When you drill the pilot holes, stop the drill bit just shy of going all the way through the stock. This way it adds a bit more strength. Once you find the perfect depth to drill, use a stop collar on the drill bit to duplicate each hole (see bottom drawing).